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COMBINATION OF HETEROGENEOUS AND HOMOGENEOUS
GROUPING TO ACHIEVE BETTER READING
AND MATH SCORES

by
Diane Cioffi-Longo

A Master's Thesis

Submitted in partial fulfillment of the requirement of the
Master of Arts Degree of The Graduate School of
Rowan University
May, 1999

Approved by _____
Professor

Date Approved May 1999

Abstract

Diane R. Cioffi-Longo

Combination of Heterogeneous and
Homogeneous Grouping to Achieve
Better Reading and Math Scores
1999
Dr. Ronald Capasso
Educational Administration

This report described the process used, for an elementary school with a student population of approximately 587 students, to investigate the existing reading and math programs offered to students. The preliminary research indicated a need for an extended staff development program, and the implementation of advanced methodologies. The conclusions of the project, as a whole, provided data which emphasizes the need for growth in reading and math pedagogy awareness with the district of Glassboro.

Purposed preliminary investigation strategies included; (a) interviews with reading and math teachers, regular homeroom teachers, and teachers in other academic disciplines; (b) a review of documents such as district reading and math results, course of study, individual student reading and math folders, and grade point averages in the reading and math classes; (c) observations of reading and math instruction; and (d) a continued review of the research and literature on grouping for instruction and related fields of study.

In response to the information acquired during the preliminary investigation an intervention strategy may be proposed to improve, modify, or expand the grouping methods, reading, and math programs offered at Thomas E. Bowe School.

Mini-Abstract

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This report describes the process used, for an elementary school with a student population of approximately 587 students, to investigate the existing reading and math programs offered to students. The research indicated a need for an extended staff development program, and the implementation of advanced methodologies. In response to the information, an intervention strategy may be proposed to enhance the grouping methods, reading, and math programs offered at Thomas E. Bowe School.

Acknowledgments

The intern would like to express sincere appreciation and gratitude to the following for their contribution to this project:

Mr. Carmen Mitcho, Principal of the Thomas E. Bowe School and mentor, for his expertise, guidance and support offered during the internship,

Susan Kornicki, friend, colleague and editor, for her editing skills and expertise,

Diana Cibo, Rose Schopfer, and all the faculty at the Thomas E. Bowe School for their support, understanding and encouragement,

Dr. Ronald Capasso, the advisor of this project, for his guidance, support and understanding throughout the internship,

My family and special friends for their love, respect and confidence,

Philip Longo Jr., my husband, for his never-ending love, patience and understanding, and

William and Joan Cioffi, my parents, who instilled in me the value of an education, for their love, support and most of all, encouragement to fulfill my goals.

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Chapter 1

Focus of Study

Introduction

The change process in which the intern chose to improve upon is the grouping of students in the classroom. Grouping has been the backbone of good sound educational decision making for as long as people have been making decisions. The intern's main focus is to devise a grouping practice for teachers and students of Thomas E. Bowe School as well as improve the instructional strategies that correlate with good grouping practices.

There are many theories behind the grouping of children. Studies have revealed that grouping students both heterogeneously and homogeneously in specific situations can be beneficial for the below average, average, and above average students. Grouping students heterogeneously can promote learning for both the below average and average learners (Slavin, 1988). To help the below average and average students the intern will group heterogeneously. Hoover, Saylor, and Feldhusen, state gifted students benefit from learning together, and should be placed with students possessing similar areas of strength. This is a form of homogeneous grouping and the intern would utilize this grouping method at strategic times in order to further benefit the above average students. Utilizing both types of groupings will enable the intern to effectively address the needs of all three levels of students.

Each grouping strategy has its own inherent weaknesses and may not promote optimum learning among all three groups; necessitating the utilization of both heterogeneous and homogeneous grouping to address the needs of all students.

Purpose of the Study

The purpose of this study is to devise an alternative process for the grouping of students at the Bowe School. The intern will conduct an action-based research design to solve the on going problem of what is the most effective way to group and instruct students for academic success. An advisory council will be appointed and the council will work together to effectively group students for instruction and guide the teachers on how to deliver the pedagogy.

Through the advisory council the intern will facilitate group processes in shared decision-making and conduct effective and efficient meetings. The intern will prepare an in-service staff development program, develop peer coaching sessions, and teacher collaboration sessions.

The educational community of Bowe School will be able to adapt a plan for grouping students for the 1998-1999 school year. This program for grouping students can be utilized and updated according to current research. The plan will be based on extensive literature review and teacher participation. The primary focus for this change committee on grouping is to keep the primary focus on what is best for all students of the Bowe School.

There are many theories behind the grouping of children. The intern wants to learn what is the best way to group the students of Bowe School for instruction. The literature reveals that students should be grouped heterogeneously in order to promote learning for each individual. Peterson (1989) concludes that low ability students learn more, remember longer, and have more positive attitudes when they are placed in high ability classes as opposed to being placed in remedial classes developed specifically for them. However, it must be stated that throughout the research there is not much evidence that heterogeneous

grouping positively affects the higher ability group (Slavin, 1986). Mixing low ability and high ability students together typically results in no growth for the high ability group.

It appears that average and below average students have much to gain from heterogeneous grouping, but we must not sacrifice gifted students' needs in our attempts to find the best grouping practices for all students. Gifted students benefit from learning together, so they need to be placed with similar students in their areas of strength (Hoover, Saylor, & Feldhusen, 1993). Cluster grouping of gifted students allows them to learn together, while avoiding permanent grouping arrangements for students of other ability levels.

Project Definitions

The following definitions will be used as an integral part of the project study, and are pertinent to comprehension of the project process.

Ability Grouping- The organizing of classrooms according to students' abilities.

Basic Skills- The independent areas of reading, mathematics and writing skills deemed necessary to function in society.

Cluster Grouping- Grouping students heterogeneously and regrouping students in the areas of math and reading ability to help students learn new material.

Cognitive Ability Tests (Cogats)- A standardized test that is used to measure the intelligence level of a student.

Heterogeneous Grouping- Grouping of students with mixed ability levels into one class. All types of academic levels are put together in classes randomly.

Homogeneous Grouping- Grouping of students with the same ability level into one class.

IOWA Test of Basic Skills(I.T.B.S.)– Standardized test used to measure verbal, math, and language.

Minimum Level of Proficiency- Benchmark identification by an authority that determines acceptable, passing performance in skill areas.

Standardized Tests- Testing in skills such as reading, mathematics, writing, etc. that are scored with reference to examples of poor, fair and good performance in those particular skills.

Limitations of the Study

The intern's project is to devise a plan for the grouping of students at Bowe School. The assignments will be ready for the onset of the 1998-199 school year. The advisory council was created from experience, consenting to participation, and experience interpreting testing results. Both heterogeneous grouping and heterogeneous grouping will be utilized to address the needs of all students.

One possible limitation is that this study is confined just to one building in the school district, so the conclusions of the study really cannot be generalized to the entire district. The faculty is another factor when considering limitations; some members of the faculty do not have the proper staff development in the area of grouping and instructing to different levels of learners. They may interpret results differently with respect to recommendations and report card grades. Every teacher has different standards and levels of expectations. Individually, the students create the limitation variables of attendance, discipline, transfers, and performance levels. A child's attendance is imperative to their education as well as behaving properly. Lastly, the curriculum itself is a limitation. The intern along with the faculty will need to devise the advanced placement curriculum, it does not meet the Core Curriculum Content Standards.

An area of major concern for the intern is getting the entire faculty accepting of this new type of grouping practice. When grouping heterogeneously, teachers will have to deal with the range of students' differences in interests and prior achievement that more

widespread use of mixed-ability classes would bring. If the teacher is not motivated about teaching the students, the students sense the lack of enthusiasm and desire teach them.

Setting of the Study

Glassboro is located in Gloucester County, New Jersey, approximately eighteen miles south of Philadelphia, Pennsylvania. Glassboro began as one five hundred-acre plantation. Today Glassboro covers 9.23 square miles with a year-round population of 15,614 (Borough of Glassboro, 1990, p.3). The population of Glassboro increases when Rowan University is in session, but it does not affect the school district enrollment.

The Thomas E. Bowe School was built in 1972. The school was established during a time of educational transition. Its design reflects a trend from the 1970's. The classrooms are open and only have three walls. The design was created to allow for flexibility, team teaching as well as individual learning. Today, there are partitions dividing the classrooms for a more structured environment.

As of October 1998, the Bowe School student population was 587 children. There are six fourth grades, seven fifth grades and seven sixth grades. Each class is heterogeneously grouped and the class sizes range from twenty four to twenty nine. There are also eight special education classes. An additional resource room is used for the mainstreamed students in special education. A summary of the enrollment of the Thomas E. Bowe School is shown in Table 1.

Table 1
Thomas E. Bowe School
Enrollment 1998-1999

<u>Grades</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>S.E.</u>	<u>Total</u>
Bowe	152	178	181	76	587

<u>New Students Registered</u>		<u>Transferred Out</u>	
Grade 4	0	Grade 4	0
Grade 5	1	Grade 5	1
Grade 6	2	Grade 6	0
Spec. Ed.	1	Spec. Ed.	0
Total	4	Total	1

The students at the Thomas E. Bowe School come mainly from low to middle income families. Most of the children live in single-family homes and some live in multiple family dwellings or housing projects.

Bowe School has 587 students. The racial composite is 353 White, 201 Black, 19 Hispanic, 13 Asian and 1 Native American. Seventy-Six students are classified to receive special education services.

Glassboro has become a very diverse community. Many orchards are now housing developments and more and more people are moving in from various areas. The once small familiar community is growing into a community of the unknown. Glassboro's new logo is that diversity is our strength and with diversity comes knowledge.

Significance of the Study

Devising a grouping plan is an important study because it will allow the Thomas E. Bowe School to have consistency when arriving at major grouping decisions concerning the

placement of students in classrooms as well as the gifted and talented program. There are many factors that affect grouping of students. There is little evidence that ability grouping or tracking improves academic achievement, while overwhelming evidence exists that ability grouping retards the academic process of students in low and middle ability groupings (French, 1990).

Based on the current literature and research, the intern and the advisory council will group heterogeneously for homeroom classes, Science, Social Studies, English, and Spelling. In the areas of Mathematics and Reading, the intern will group the challenged students in clusters, utilizing homogeneous grouping. The results of this projects efforts is to create students who will become productive, responsible individuals who cooperate in their own learning.

Instituting and preserving an effective grouping process will improve students performance outcomes on state mandated tests as well as improve students' self-esteem and performance in the classroom.

Organization of the Study

The study will include an investigation of students and their ability to perform on the standardized tests and performance on the report card. The remainder of this study will include the following: Chapter 2 Review of Literature-researched data of grouping and related field study; Chapter 3 The Design of the Study- a general description of the research design, description of the development and design of the research instruments, a sampling technique used in the study, a description of the data collection process, and a description of the data analysis; Chapter 4 Presentation of the Research Findings- results of surveys, grouping committee participation, and IOWA scores; and Chapter 5 Conclusions,

Implications, and Future Study- conclusions, implications and further areas of study obtained from the finds of the project's results.

Chapter 2

Review of Literature

Both ability grouping and heterogeneous grouping by schools and teachers are an inescapable fact of life. Over the last century the concept of tracking or sorting of the students between and within classes has generated a litany of debate and acrimony. Grouping is a long-standing process that is rooted in gender, race and ability issues. According to Annie Wheelock (1994), “*tracking refers to the practice of sorting students into different programs of study*”. In a secondary school setting this may be referred to as college track, general program or vocational studies. In a primary grade setting, tracking can refer to math, reading or any type of ability groups.

During the past decade, research on tracking and ability-grouped class assignments has provided striking evidence that these practices have a negative impact on most children’s school opportunities and outcomes. Moreover, the negative consequences of these practices disproportionately affect low-income, African-American, and Latino children (Gamoran, Berends, 1987). There is little evidence that ability grouping or tracking improves the academic achievement, while overwhelming evidence exists that ability grouping retards the academic process of students in low and middle ability groupings (French, 1990).

Jeannie Oakes (1995) performed a study with two cities that utilized tracking in their school systems. She found that in both the San Jose and Rockford school systems, African-American and Latino students in lower track classes had fewer learning opportunities.

Teachers expected less of them and gave them less exposure to curriculum and instruction in essential knowledge and skills.

Susan Black (1993) states clearly that when it comes to achievement, self-concept, or curriculum and instruction, ability grouping simply doesn't work. By any measure, grouping students by ability is indefensible, yet the practice persists and so does the inequality it perpetuates. Researchers tell the same story over and over: Ability grouping and tracking does not increase student achievement. According to Robert Slavin (1987), ability grouping and student achievement in elementary schools finds that children do not learn more when they're permanently divided into classes on the basis of ability groups. Slavin also states that students should remain in heterogeneous classes most of the time and identify with those classes; teachers should regroup students by ability in reading and math only if it will help students learn new material.

Grouping practices that contradict the research, Slavin says, include segregating students into ability groups for almost all or most of the day; grouping students according to ability or achievement rather than their skill level in a specific subject; maintaining rigid rather than flexible groups; and creating racially identifiable classes.

In a large scale field study of ability grouping, Walter Borg (1966) collected data on more than 4,000 fourth, sixth, seventh, eighth, and ninth-graders. Borg reported that, overall, assigning students randomly to groups is far more beneficial, both academically and socially, than organizing students according to perceived ability or achievement. In contrast, in one of the very few studies to notice any benefits of ability grouping, Kulik and Kulik (1982) claim that between class grouping has small positive effects for achievement for high ability students. Some researchers question whether small gains for high achievers at great expense to middle and low achievers is sufficient evidence to continue to practice.

Ability grouping can have a powerful role in determining the academic opportunities available to students. Jeannie Oakes (1992) reports that students in high tracks rarely encounter curriculum barriers that might keep them from successful futures. She finds that high-track students almost automatically take courses that enable them to enter college and subsequent professional careers. Students in low tracks, on the other hand, don't have the option of taking these courses because of the track they were placed in. In effect, the lower track students are "gatekeepers" while higher track students break away at the drop of the gate onto the fast track.

As our society continues to experiment social, cultural, and economic changes, more students may fall into the lower ability groups. As practiced in most schools, ability grouping has more negative than positive effects, but because of lack of alternatives, schools continue to practice ability grouping (Sergo, (1995). In ability grouped classes, clear differences exist in instructional quality and teacher behaviors. Research indicates that ability grouped classes frequently deliver different course content and instructional quality to students, with lower grouped students receiving less on practically all measures (Lake, 1988). The quality of instruction and the climate for learning favor high level groups (Gamoran, 1992).

Oakes (1988) also points out that teachers of low ability classes spend more time on behavior management and less time on instruction. They are less encouraging, more punitive, and place more emphasis on behavior and less on academic learning. Low ability classes simply have classroom environments that are less conducive to learning than do peers in upper level classes.

Johnston and Markle (1986) indicate that student perceptions of self and others are affected by the ability group to which they are assigned. It has also been observed that students tend to segregate themselves by groups even outside of class. Isolation of better students does not help the academic self-concept of lower grouped students (Lake, 1988).

Grouping practices that contradict the research, Slavin says, include segregating students into ability groups for almost all or most of the day; grouping students according to ability or achievement rather than their skill level in a specific subject; maintaining rigid rather than flexible groups; and creating racially identifiable classes.

Slavin (1988) identifies that grouping students homogeneously may doom children who are not in the top tracks to second class instruction and ultimately, second class futures. Peterson (1989) concludes that low ability students learn more, remember longer, and have more positive attitudes when they are placed in high ability classes as opposed to being placed in remedial classes developed specifically for them.

Gifted Readers and the Mathematically Advanced

In an attempt to figure out what is best of all of the students, the gifted students need not be sacrificed either. Hoover, Sayler, & Feldhusen, (1993) point out cluster grouping for the gifted students. Cluster grouping of gifted students allows them to learn together, while avoiding permanent grouping arrangements for students of other ability levels. It appears that the average and below average students have much to gain from heterogeneous grouping, but we must not sacrifice gifted students' needs in our attempts to find the best grouping practices for all students. Gifted students benefit from learning together, so they need to be placed with similar students possessing similar areas of strength.

Maryann and Gary Manning (1995) state grouping that facilitates students working and learning together is an essential element of a classroom environment. In the past, students were grouped based on ability or achievement, which was usually determined by a standardized test.

Many educators are aware of the extensive research that points to the harmful effects of ability and achievement grouping. They also know that students placed in a low group in their early years almost always remain in the low group throughout their schooling. Unlike students placed in homogeneous groups, students in heterogeneous groups learn to respect and value other class members. Higher level students learn to take responsibility for helping others.

Worthy and Hoffman (1996) believe that “Variety is the spice of life” when it comes to grouping students for instruction. Just a few things are always right for every student, few things are always wrong. At times, ability grouping may need to be utilized for a short period of time. The important consideration is that the student is not locked into the group for long periods of time with no other group identification. Always being the “crow” instead of the “eagle does not offer opportunities for the lower functioning students.

In an effort to meet the needs of the gifted and do what is best for the lower track students, a happy median needs to be made. Kulik & Kulik, (1992) believe that flexible grouping procedures, combined with appropriate, differentiated instruction, led to gains in academic performance for highly able students. Less able students are not harmed by the flexible grouping.

If the gifted students remain in the whole class setting they will lose interest and become content with reading less demanding selections (Betts & Neihart, 1988).

Characteristics of some highly able readers, such as superior recall, persistent curiosity, and ability to understand complex ideas, may not be apparent when they are required to work at a pace and level of less advanced readers (Davis & Johns, 1991). Some develop poor study habits or are unable to persevere when faced with the challenges that eventually surface in most academic settings (Betts & Neihart, 1988).

Appropriate, differentiated reading programs are essential for the academic growth of highly capable readers and for the preservation of their desire to learn. A stimulating reading program for gifted readers has at least two major components: (a) provisions for mastering the basic curriculum quickly through curriculum compacting (Renzulli, 1997), and (b) a differentiated curriculum created through modifications of the content and the processes used to explore that content (Maker, 1982).

The needs of gifted readers extend beyond the instruction offered in a typical heterogeneous reading program. Through curriculum compacting, modifications of the content, and the processes used to interact with that content, an appropriate program can be created that will challenge gifted and highly able readers (Dooley, 1993).

There is more than one solution and one path to take when grouping for gifted math-performing students. Teaching that caters to all abilities is a complex undertaking, perhaps the most difficult component of which is identifiably suitable activities or tasks that can stimulate the better students while giving the slower students opportunities for success (Sullivan and Clarke, 1991). Despite the variety of forms, the conventional justification of ability grouping is basically the same across grades and subjects. The theory is that grouping allows teachers to match instruction to student capacities more effectively than in the nongrouped, heterogeneous context (Kerckhoff, 1986).

According to Hoffer (1992) and his study on ability grouping and student achievement in Science and Mathematics, he found that grouping has no significant overall benefits in either Science or Mathematics. In both subjects, students in the high groups learn somewhat more and students in the low groups learn less than comparable students in nongrouped schools.

It has already been stated by Slavin (1988) that ability grouping is currently not working to improve the learning outcomes for average and lower-achieving students. However, as stated by Camarena and Valli, (1990) ability does work for the advanced or gifted ability group. Can we help the gifted without hurting or impairing the average or lower achieving learner? Is there an optimal solution?

Berliner and Pinero (1985) have several solutions when keeping the heterogeneous classroom intact while still grouping for the gifted reader or math student. Pinero warns teachers to make sure that it is indeed ability that is being used as the criterion and not laziness on the part of the student. Same goes for the attention levels of the students, inattentiveness could result from boredom and this student should be moved to the higher ability level. Another thing to keep in mind is that groups do not have to last forever. Groups can arise out of the daily lesson. Students can change day to day, and certainly one week to another.

It is the intent to mirror the research that has already been done at Bowe School. As we all know there is a plethora of literature on the topic of heterogeneous grouping and homogeneous grouping. The avenue that is going to be pursued is a mixture of both worlds. Primarily heterogeneous grouping will be utilized with only a small sample pulled out for advanced reading and math classes. In conclusion, it is up to the educators to prepare the

students adequately for life after school. The teachers need to find an arrangement that is highly equitable and that improves the educational practices. Achievement levels must be measured frequently so that students may be regrouped during the school term, and teachers can adapt their instructional methodologies to the level and pace of the students' abilities and needs.

Chapter 3

The Design of the Study

The research investigation took place during the months of May 1998 through May 1999 at Thomas E. Bowe School in Glassboro, New Jersey. The intern met the objectives of her investigation by conducting a review of documents, personal interviews, surveys, classroom observations, establishing a grouping criteria and an ongoing review of literature. The objective of the research identified the direct correlation between the appropriate grouping of students and the performance on the IOWA test scores of Basic Skills.

A staff development program was provided for the teachers of the advisory council as well as the entire faculty. The staff development program was conducted by an out-of-district consultant who specializes in grouping students at the onset of every school term. The program identified numerous grouping strategies in addition to how to interpret test results into the grouping process. The consultant suggested the following steps be taken when grouping students in all academic areas: students mathematics and reading folders should be collected and monitored periodically to reflect the performance of the students in their particular assigned group, documentation of students in their permanent cumulative folder should be reviewed and updated, evaluation of the placement sheets should be reviewed, review of testing results, staff in-service for new programs and ongoing monitoring of student performance. The in-service provided the intern with information regarding the different grouping styles that a school districts in the neighboring areas utilize as well as specific feedback on parental requests and “special” situations that arise when grouping students.

The staff developer made himself accessible to the committee via telephone, fax, email or mail throughout the entire school year to confer, discuss, or ask questions pertaining to any and all in-service program activities or related areas of interest.

Description of Development and Design of Research Instruments

A review of documents included an analysis of state test scores, enrollment figures for the 1998-1999 school year, review and evaluation of placement sheets from the 1997-1998 school year, and an analysis of simple random sample of individual student reports from state tests. A teacher survey was conducted to determine attitudes towards grouping students for instruction. Personal interviews were conducted by scheduling individual appointments with several building administrators and the superintendent to identify attitudes and opinions on effective grouping practices. All of the research methodologies provided the intern with a full description of the grouping practices at Thomas E. Bowe School.

The various grouping programs offered to the students of Bowe School exhibited many of the characteristics of successful grouping practices as stated in the review of literature. The investigation revealed the existence of a well throughout grouping process. The students were given a multitude of opportunities to grow and perform at their own level of learning. Additionally, students had the opportunity to test out of a mathematics course and take it at the Glassboro Intermediate School for an advanced placement. The council made arrangements for any student who performed at the eighth level of mathematics or higher the opportunity to advance themselves to their appropriate level of learning.

The existence of many positive grouping techniques and instructional methodologies, as a means to improve the students' performance in the classroom, were a reflection of the recommendations found in the literature. However, the investigation did identify a lack of

staff development in the advanced classes. The teachers were asked to teach an advanced course with little materials to use. A curriculum needed to be development in order for the teachers to effectively instruct the course.

Based on the investigation findings, gathered through personal interview, surveys, and classroom observations, as well as information found during the review of literature, the intern had conducted that Bowe School had a well designed and effective grouping program instructed by dedicated, resourceful and conscientious teachers. However, the researcher believed that there were improvements and expansions that had to be made which would bring the program more closely in line with the suggestions found in the literature and those stated by the grouping committee, advanced instructors and the academic committee, which represent characteristics of successful grouping practices. According to the standards set forth by the assistant superintendent of curriculum instruction, Bowe School students will hopefully at least meet or surpass the state average and district factor grouping passing percentages on the IOWA Tests of Basic Skills.

Description of Sample and Sampling Technique

The researcher planned to use the data gathered during the investigation (see Appendix A) to build the idea which will be to improve and expand the grouping practices at Thomas E. Bowe School. All interventions are focused towards improving the grouping practices of students prior to being administered the IOWA tests in April of the 1999 school year. The intern intended to use a multifaceted approach to accomplish this objective.

The intern implemented all planned intervention strategies during the identified time frame. The process objectives were scheduled and achieved in an effort to improve

the Bowe School's IOWA test scores, and to increase staffs grouping practices.

The advisory council grouped students for the 1998-1999 school term by utilizing heterogeneous grouping as well as homogeneous grouping practices. Once the students had a placement for the onset of school a questionnaire was administered to the three delegated teachers, by the intern, to determine their needs for additional training in grouping practices and instructional techniques. Other than the initial staff development awareness session(see Appendix F), the intern organized and established collaborative sessions for the staff by arranging times and meeting locations for the planned bimonthly sessions.

The researcher conducted ongoing classroom observations of the educational instructors and completed monthly analyses of their lesson plan books. Classroom observations were scheduled by the researcher and teacher according to a mutually agreeable time. A random sample of student's individual record of progress located in their respective reading and math folders was reviewed. All of the intervention strategies have been effectively implemented by the intern and completed on schedule as planned and stated in this project.

Once the students were placed in appropriate classes the project began to take shape with the administration of a questionnaire to the random sample of teachers in September of 1998. The results of the questionnaire were used to design the staff development program for our first in-service day in September.

Immediately following the culmination of results, the intern ,met with the out-of district staff developer to review the needs of the district, discuss the outcomes of the questionnaire. Also, during the month of September a council was created. The council was selected on experience, consenting to participation of monthly meetings

throughout the 1998-1999 school year, and the understanding of the IOWA testing process. Each participant was given a set of evaluation forms and a list of meeting dates by the researcher. A complete grouping list and a schedule of all activities for the year, along with all forms and evaluations to be completed, were disseminated to the teachers.

On September 8, 1998 the first staff development session was held at Thomas E. Bowe School in the pod area. The staff developer provided participants with several handouts and instructed the group using a series of overhead transparencies and hands on learning activities.

The intern observed each selected teacher during the week of September 29, 1998. Lesson plan books were also reviewed on the last Friday of the month. The same teachers met once with the committee to review results thus far into the school year.

In the month of October 1998, the intern once again observed the three teachers instructing one of their classes. The first peer observations were completed in October. The teachers continued with the scheduled monthly collaboration sessions with one another and the advisory council. The intern also disseminated new articles on current grouping practices.

On November 10, 1998 the district held its in-service sessions. At these sessions, different committees reported what was going on within their subgroup. At this time the intern presented the results and finding of her project to the entire faculty. Also, the intern conducted a review and analysis of a random sample of student's individual reading and math folders during the month of November. Student's individual record of reading and math activities and record of progress for quarter one were analyzed by the intern. The three teachers continued with their monthly collaboration sessions with one another and advisory

council. The intern once again disseminated new articles and literature to the faculty. Also, the monthly review of lesson plan books was completed in November 1998.

In December 1998 the intern again observed lessons conducted by the three selected teachers. Each participated in a peer observation session during this month. Other monthly activities consisted of scheduled collaboration sessions, lesson plan book content analysis, and new articles disseminated the faculty.

On January 15, 1999 the advisory council met to discuss the progress of the project. The intern provided the council with new literature regarding peer coaching and grouping practices. The monthly analysis of each teacher's lesson plan book was completed by the intern, as well as the second random review of student's individual reading and math folders and record of progress forms.

The internship project was completed as set forth by the intern and described previously. The intern provided staff development sessions, administered questionnaires and surveys, created a grouping criterion, and conducted classroom observations of the three randomly selected teachers. The intern also established collaborative sessions, peer observations, and an advisory council to assist the assigned teachers in expanding and improving their instructional classrooms with different learning abilities. Student's individual reading and math skills improvement was also the focus of the intern. Individual student reading and math folders were created a record of progress initiated, and a survey completed. The interim findings of each component will be used to assess and evaluate the project.

Description of Data Collection Approach

Each student had an individual reading and math folder which included a record of student progress (see Appendix B and C). They were also held responsible for completing a theme test or chapter test at the end of each unit. At the conclusion of each marking period the students' tests were averaged to determine a quarter reading or math average. A review of this document, along with other assessments, revealed the degree of improvement attained in student reading and math development.

The project involved many sessions of peer collaboration, peer coaching, and articulation sessions with reading and math members which were documented using evaluation forms (see Appendix G). These sessions provided opportunities for participants to discuss teaching situations or issues they would like to share with their peers. The goal was to improve instruction by providing teachers an opportunity to share their experiences with peers which would hopefully benefit all parties involved, but ultimately the students.

Description of Data Analysis Plan

The project proposal had two objectives. First, 85% of the students falling below the minimum level of proficiency on the IOWA tests of basic skills math and reading sections of the test, at Thomas E. Bowe School, would demonstrate an increase in their reading and math scores from the previous year.

The second objective was that all teachers at Thomas E. Bowe School would improve and expand their knowledge of grouping students for instruction by having participated in the staff development program as a result of the project intervention during the months of September 1998 through May 1999. The intern identified the implications of these teaching strategies during classroom observations and when conducting content review and analysis of

reading and math folders. Additionally, lesson plans were compiled and observed during the investigation from September 1998 through May 1999 and compared to identify improvement and expanded instructional strategies in the reading and math programs at Thomas E. Bowe School.

To accomplish the objectives set forth by the intern, there were several process objectives which took place. To meet the objective to improve students math and reading skills, the reading and math teachers established individual student reading and math folders for all students in their respective classes as indicated by the presence of these folders in each reading and math classroom. Each student's reading and math folders contained a record of math and reading activities (see Appendix B and C), record of student progress, testing results, and data reflecting other reading and math activities.

The process objectives required the teachers to participate in several monthly activities. Teachers participated in peer collaboration sessions with colleagues as indicated by documentation of evaluation forms (see Appendix D). The teachers observed one another and participated in peer coaching sessions as indicated by evaluation forms (see Appendix E). Current research materials and related literature on grouping practices and instructional strategies as indicated of literature disseminated on a daily basis.

The project took place from June 1998 to May 1999 at Thomas E. Bowe School, Glassboro New Jersey. The intern used several intervention strategies to improve and expand the grouping practices and used other strategies to improve the reading and math performance of students. A further review of literature and current research was conducted which provided the intern and teachers with current and supplemental data on grouping instruction and related fields of study. Classroom observations and review of lesson plan

books was conducted by the intern to identify instructional methodologies used for reading and math instruction and to determine the implementation of strategies targeted through staff development training. The teachers periodically observed lessons of their colleagues and participated in peer coaching sessions. Additionally, the teachers collaborated each month with one another and an advisory council designated to provide support to one another. Finally, the intern had herself evaluated (see Appendix H) as an educational leader and resource person to culminate all results.

Chapter 4

Presentation of Research Findings

This internship project took place from May 1998 to June 1999 at Thomas E. Bowe School in Glassboro, New Jersey. The intern implemented all improvement strategies delineated by the initial design. The three teachers, chosen through a random sample, participated in staff development sessions with the final program scheduled for May 1999. Individual student mathematics and reading folders were created which contain an assignment log, record of student progress, scores of tests, and written comments received from teacher and peer conferencing sessions. At the conclusion of each marking period the students' tests were averaged to determine a quarter reading and math average. The individual reading and math folders displayed evidence of accurate record keeping of activities assigned and subsequently type and evaluation outcomes. The lesson plan books of each teacher were reviewed and analyzed by the intern. Each plan book indicated that frequent peer evaluations and conferencing took place.

All scheduled monthly activities were completed during the researched project. All three teachers participated in two peer collaboration sessions per month and one collaboration with the Math and Reading teachers of students they have in common. Additionally, they completed two peer coaching sessions, attended monthly advisory council meetings, submitted lesson plan books, and reviewed several research articles relating to reading, math, and reading and math instruction. The conclusions of the project will be discussed in this chapter. Let it be noted, the complete findings of grouped classes cannot be

revealed until the return of the IOWA tests of basic skills results in June 1999, all other discoveries will be reported.

Research Findings

An analysis of the teachers questionnaire results revealed that all three teachers had limited training in grouping students for instruction and advanced placement of students in reading and math. The responses indicated that the teachers' only means of staying current in reading and math instruction was through a review of professional publications, Internet web site access, and contact with colleagues and local college professors. The teachers requested staff development sessions which focused on motivating at-risk students, integrating technology in reading and math instruction, grouping techniques, and identifying real world activities for teaching reading and math skills. In addition to the type of information requested, the teachers stated specific expectations from their involvement in the staff development sessions. The teachers stated a desire to see students become better readers and math students, increase scores on the reading and math section of the IOWA tests of basic skills, establish more frequent collaboration among teachers from all academic disciplines in the school, acquire information on current trends for increasing students reading and math skills, and learn instructional methodologies to teach reading and math using technology.

After the completion of the staff development sessions the researcher documented the outcomes of the training. The sessions were highly interactive between the staff developer and the teachers. Discussions focused on the challenges faced by reading and math instructors which included how to assess student's understanding of content, how to involve students in the process of remembering content, how to structure lessons to accommodate multiple Intelligences, methods for generating interest in reading and math, and peer working

activities. The staff developer provided the participants with a variety of instructional methodologies to meet their challenges by covering a multitude of content designed to establish an effective reading and math program. After each in service training session the teachers completed an evaluation form and submitted it to the intern. The evaluations indicated that the three teachers implemented a number of new strategies in their reading and/or math program which included peer working activities, skill development for content comprehension, and a variety of student centered assignments which actively engaged students in reading and math through brainstorming activities, peer conferencing, working at the board, and reading aloud.

A reading and math pre-test was also administered to students within, the three assigned classes. The test was given on September 16, 1998 by each teacher to their respective students during their regularly scheduled class. The reading pre-test was graded using a holistic scoring method which ranges from zero to six points with the higher score indicating more proficiency in reading ability. There were 77 students who completed the reading task. The average holistic score was a 2.9 as reflected in Table 2.

Table 2
Sixth Grade Reading Pre-Test Results

Class	Total Students	Average Score
A	26	2.8
B	25	3.4
C	26	2.8
Total	77	2.9

A math pre-test was also administered to all students within the three assigned classes. The test was given on September 16, 1998 by each teacher to their respective students during their regularly scheduled class. The math pre-test was graded using a percent score from 0%-100% with the higher score indicating more proficiency in math ability. The average score was 71% as reflected in Table 3.

Table 3		
<u>Sixth Grade Math Pre-Test Results</u>		
Class	Total Students	Average Score
A	26	72
B	25	73
C	26	69
Total	77	71

Students who participated in the reading and math pre-test were given a 60 minute time frame to respond to the questions given. Class B of students received the highest average score on the reading and math pretest. All of these students were previously identified as being deficient in reading and math based on scores from a state-mandated test. The effort put forth by these students on the reading and math pre-test may be an indication of their desire to improve their reading and math skills so they can be successful on the IOWA tests.

The intern completed three observations of each teacher during the first half of the project. The classroom observations were conducted to identify instructional methodologies used by each teacher to teach reading and math and to document the implementation of teaching strategies presented during the staff development training sessions. Staff

development suggestions used by the three teachers included the teacher reading with the students during class, peer working skills, using mathematics guess and check strategies, acting out dialogue, and providing students with opportunities to correct work. An analyses of lesson plan books also indicated that several of the training activities had been implemented into the reading and math program.

The teachers completed 10 collaboration sessions with each other. These bimonthly meetings took place either before school, after school, or during the teachers preparation periods. Evaluation forms were submitted to the intern at the end of each month. The intern reviewed each evaluation form and noted the comments by each teacher regarding the benefits teachers received from peer collaboration sessions. The primary focus of the sessions, as stated by the teachers, was to increase their personal knowledge of reading and math skills, identify new instructional methodologies to provide students with more opportunities to develop and improve their reading and math skills, share challenges in teaching reading and math, discuss new techniques to teach old lessons, and increase their insight and skill in the use of technology to teach reading and math. All three teachers also indicated they plan to use a variety of techniques to disseminate information to their classes such as through verbal instructions, written directions, and visual presentations using computer programs. The teachers stated a conscientious effort to address both visual and auditory senses when presenting lessons.

Monthly collaboration sessions were held between the selected teachers and regular classroom teachers. These monthly sessions received mixed reviews by the selected staff regarding the benefits received as a result of these meetings. One teacher stated difficulty in arranging mutually convenient meeting dates and-times. She identified the lack of a similar

planning periods and other professional and personal obligations as deterrents to scheduling meetings. The other teachers delineated benefits of their sessions. There was a genuine desire to plan and coordinate reading and math instruction in an attempt to deliver similar topics and concepts to students at the same time. The teachers stated that students would benefit from more practice and reinforcement on the various reading and math skills if they were taught simultaneously in each class. The teachers exchanged their respective lesson plan schedule for each month to facilitate this goal. These collaboration sessions also provided opportunities to discuss the use of technology in reading and math instruction and to share computer skills and knowledge between the teachers.

The intern conducted an ongoing review of the literature and research on reading and math instruction during the first half of the project. The books and articles obtained by the intern were disseminated to the staff. The intern delivered new materials on a monthly basis and discussed the availability of these materials with each teacher.

The intern established an advisory council which consisted of three in house reading and instructors who met each month with the three teachers. The advisory council function was to provide support and ideas to the staff in the area of grouping, reading, and math instruction. The meetings were held immediately following the monthly faculty meetings. All participants in the advisory council completed and submitted evaluation forms at the conclusion of each session. The topics discussed at these meetings included teaching concerns regarding reading and math skill development, aligning lesson plans with the curriculum, exchanging strategies for peer activities, using computers, and math and reading across the curriculum. The advisory council members also discussed strategies to deliver

instructional methodologies to the various academic disciplines for developing the reading and math performance for their students.

The designated teachers also participated in two peer observation sessions during the first half of the project. The first session took place in October 1998 and the second session was conducted in January 1999. The teachers involved reported that the sessions benefited them by providing an opportunity to share new ideas through actual observation of teaching techniques being put into practice, seeing technology implemented in an actual lesson, exposure to different styles of building rapport with at risk students, and the ability to compare lesson plan delivery where activities are student-centered and the teacher is the facilitator. The second peer observation sessions focused primarily on computer-assisted reading and math instruction. The teacher participated in a lesson where computers were used to assist in the delivery of instruction. All students were provided a visual demonstration using technology which complimented the verbal instructions delivered by the teacher. The teachers stated the benefits of having more than one method of transmitting information and directions to the students. The teachers responded on their evaluation forms that students demonstrated enthusiasm for this new means of providing a visual presentation and that using a variety of teaching techniques is helpful in addressing the various learning styles of students in each class.

Students assigned to these researched classes were also expected to participate in several intervention strategies developed by the intern. Individual student reading and math folders were created. Each student in the program has a reading and math folder which contains a record of assignments and a record student progress section. The intern conducted a random review of student's individual reading and math folders to determine the accuracy

and completeness of record keeping, amount of work completed, type of feedback provided, type of assignments required, and overall progress of the students. After random reviews of student writing folders the researcher concluded that record keeping was documented accurately and completely. The amount of reading and math activities and type of assignments have varied by instructor as reflected in Table 4.

Table 4
Student Reading and Math Folders: Assignment Review

Teacher	Number of Assignments	Feedback Comments	Styles Grades	Conferencing Teacher	Styles Peer
1	11	6	6	4	3
2	8	7	3	1	5
3	8	7	7	5	4
Average	9	6.6	5.3	3.3	4

Each student assigned to the program completed the required number of reading and math tasks for each quarter. A review of students progress record for one teacher revealed that of the 27 students enrolled 9 showed an increase in their average score from quarter one to quarter two. Eleven students had no increase in their average score while 7 students declined from quarter one to quarter two. The second teacher submitted documentation that indicated 15 of her 25 students enrolled in her program increased their average reading and math scores from quarter one to quarter two. Eight students showed no improvement and 5 students exhibited a decrease in their average reading and/or math score from quarter one to quarter two. The third teacher recorded 12 students improved their average scores, 7 stayed

the same and 7 decreased their average scores from quarter one to quarter two according to their reading and math folders.

Research Observations

The grouping project objectives to improve the scores on the IOWA test of basic skill results, and to increase students reading and math skills by implementing additional instructional strategies and staff development programs were met throughout the duration of the program. At the conclusion of six months of the project the intern has observed and recorded improvements in the reading and math program and students reading and math skills as evidenced by several evaluation outcomes. The teachers have returned all evaluation forms to the researcher indicating their use of new instructional methodologies acquired through their involvement in the staff development sessions. Student involvement has increased as evidenced through lesson plans, record keeping results, and completion of numerous reading and math assignments.

The intern has identified that each teacher has participated in peer observations, staff development sessions, peer collaborations, and advisory council meetings. Additionally, these teachers have articulated with regular classroom teachers and utilized the articles and literature. These teachers have also demonstrated several new reading and math instruction methodologies in their lessons as reflected in their lesson plan books and observed by the researcher. The individual progress of students' reading and math skill development was difficult to assess at the mid-point of the project because post-survey responses and post-test results were not complete. There is some documented improvement noticed through the comparison of scored assignments from quarter one to quarter two as indicated on individual student record of progress forms.

The intern plans to conclude the project through the continued implementation of designated strategies and process objectives. Based on the interim findings gathered through surveys, classroom observations of teachers, participation in staff development sessions, analysis of students' reading and math folders, and a review of all evaluation forms, the researcher has concluded that the reading and math programs and instructors have improved and expanded their instructional concepts. The teachers incorporated several new teaching techniques into their lessons and used suggestions acquired from collaboration session. The researcher also noticed expansion to the reading and math programs based on an analysis of lesson plan books.

Throughout the project, the researcher realized that students, staff, and administration could increase their educational knowledge on a multitude of levels if given the appropriate tools and guidance. Although the length of the study's time is limited, the ideas can continue to progress, into the future, and throughout the educational environment. All that is required for reading and math success is dedicated students, staff and administration, if there are willing participants in improving the standards of children why not use every facet to succeed? Is that not what all educators strive to accomplish? The results of the project proved the willingness of some and the determination of others, but question is...how do we link this educational chain to all?

Chapter 5

Conclusions, Implications and Further Studies

Study For Project

A review of the results of the project was conducted in March 1999. The purpose was to identify areas, of the grouping program that were successful, could be improved and additional techniques expansion. The project conclusions will assist in aligning Glassboro's Reading and Math programs with the characteristics of successful programs, as identified in the literature; as well as the Core Curriculum Content Standards as stated by the Reading and Math experts.

The intern found the major conclusions, from the Reading and Math classes, to center upon the need for an extended staff development program, and the implementation of advanced methodologies. The conclusions of the project, as a whole, provide data which emphasizes the need for growth in Reading and Math pedagogy awareness within the district of Glassboro. As a future administrative leader, the intern realizes that it is her educational responsibility to communicate with others concerning the instructional needs of Glassboro's students. The researcher has requested, and has been granted permission from the principal, to instruct members of the staff on the advantages of using the Accelerated Reader in the reading classes. This is ideal for the intern because this mirrors one of her portfolio projects. Initially the reading teachers will receive training, and then the a turn-key style of leadership will be facilitated to extract the program's concepts to other educational departments. Extending the intern's leadership responsibilities beyond one year, benefits students and educators in an attempt to continue success.

Study For Leadership

The intern has exhibited numerous dimensions of her leadership characteristics throughout the practicum. The intern was most successful in the leadership dimension of organization. Intervention strategies, evaluation forms, and time lines were clearly delineated by the intern, in addition to her providing guidance and assistance to the staff when requested or needed.

The individual and group leadership dimensions of the researcher have shown strength and skill as she effectively facilitated the needs of the group and each individual during the pursuit of completing intervention strategies and planned activities. A demonstration of strong initiative has also been a dimension demonstrated by the researcher as she guided the teachers through each step of the practicum. The intern exhibited flexibility and persistence in acquiring and reviewing all feedback from evaluation forms, reading and math folders, student record of reading and math assignments, lesson plan books, and students' progress reports. As staff members and individual students' needs changed the intern demonstrated the ability to adapt to these changes and then use creativity in the development of modified plans.

The intern used effective written and oral communication skills to inform the teachers, staff developer, practicum observers, and all other participants in the project of the ongoing developments and outcomes of project interventions. The intern met formally and informally, on a daily basis, with the teachers in an attempt to meet their individual needs and address any areas of concern regarding their instructional program. This daily contact has revealed the intern's leadership dimensions of

consideration reading and math teachers' needs and feelings were considered when the intern made plans or decisions which involved them.

The researcher was highly interactive with the staff, advisory council, staff developer, and students during the practicum. The continuation of planned interventions will further expand and strengthen these leadership dimensions of the researcher and contribute to the development of other leadership attributes. The researcher intends to focus on ongoing improvement and refinement of all leadership dimensions in the areas of organization, problem solving, communication, task orientation, and interpersonal qualities.

Study For Organizational Change

Collaboration and personal interaction is the key to educational enhancement. The intern involved the staff in every aspect of the reading and math project. The creation of different councils, allowing individuals to attend inservice workshops, reviewing plan books, monitoring students and so on and so on. The intern interacted with the organization in a dimension based on organization and leadership. There were individuals, who assisted beyond the expected level of interaction, and those who made their ideas known in quieter ways-notes, private conversations sending students to the lab. Overall the intern found the organization to be positively susceptible to the creation and operation of the grouping project. It is the intention, of the intern to continue the grouping processes for the 1999-2000 school year.

The process objectives required the teachers to participate in several monthly activities. Teachers participated in peer collaboration sessions with colleagues as indicated by documentation of evaluation forms (see Appendix G). The reading and math teachers

observed one another and participated in peer coaching sessions as indicated by evaluation forms (see Appendix D).

Study In All Areas

A list of monthly activities to be conducted during the practicum include a review of writing teachers' lesson plan books to identify the implementation of teaching strategies presented in the staff development sessions. There will be two monthly sessions of peer collaboration among the reading and math teachers to discuss areas of interest and concern regarding instruction. An evaluation form will be completed and submitted to the researcher following each session. Also, there will be monthly advisory council meetings where teachers can discuss any area of concern or topics of interests with more experienced reading and math teachers. These monthly sessions will be evaluated by each participant on the designated evaluation form provided by the researcher.

During the practicum process, the intern will be conducting an ongoing review of the literature relating to grouping, reading and math research, and reading and math instruction. New materials will be disseminated to the faculty as they are acquired.

Future Study

The intern further recommended that the reading and math programs, offered to the students at Thomas E. Bowe School, implement the following changes to meet the educational needs of the students enrolled in these programs. Interviews with reading and math teacher that the reading and math instructors participate in staff development programs (see Appendix G) which provide training in reading and math instruction through the grouping process. This program would also benefit from increased communication between

the various subject disciplines and the coordination, of instruction for those students they have in common as suggested by teachers.

To accomplish these objectives the intern will create an administrative team which will be in contact with each reading and math teacher a minimum of one time per month. This time will be used to monitor the teacher's progress and to address any questions, concerns, or challenges faced by the instructors. The researcher will also serve as a liaison between the staff and the the administrative team conducting the consultations. Further studies which benefit reading and math students will be conducted as the researcher continues to acquire materials and keep teachers informed of the arrival of new research and literature. The on-going interventions will require the researcher to be visible, highly interactive with the staff, and to observe students and staff in a multitude of settings for many years to come.

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Appendix A
Grouping Questionnaire

Pre-Inservice

Grouping Questionnaire

1. How many years have you been teaching?
2. What subjects do you teach?
3. Have you had any specific training in the area of grouping or grouping instruction?
If so, what?
4. What is your level or knowledge regarding grouping for instruction? Grouping instruction for at risk students?
5. If you were provided an opportunity to receive training in grouping students for instruction what area(s) would be most beneficial to you? Please specify.
6. Have you ever worked in a departmentalization setting? If so, explain.
7. Do you know how to interpret test results? Can you apply those results to the needs of your students?
8. How are your students math tasks evaluated?
9. How are your students reading tasks evaluated?
10. How do you reach the gifted student in your classroom?
11. How do you reach the basic skills students in your classroom?
12. What resources are available to you that assist you in keeping informed on current research and theories related to grouping for instruction?
13. How beneficial would additional time for collaboration with other reading and math instructors be for you? Additional time for peer observations and peer coaching sessions?
14. What do you hope to gain from being involved in staff development training programs designed to improve and expand the grouping process and practices at Thomas E. Bowe School? Please specify.

Appendix B
Student Record of Reading Activities

Student Record of Reading Activities 1998-1999

Teacher Name:		Student Name:	
Quarter One		Quarter Two	
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Average:		Average:	
Quarter Three		Quarter Four	
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Average:		Average:	

Appendix C

Student Record of Math Activities

Student Record of Math Activities 1998-1999

Teacher Name:		Student Name:	
Quarter One		Quarter Two	
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Average:		Average:	
Quarter Three		Quarter Four	
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Test	Grade	Test	Grade
Average:		Average:	

Appendix D

Teacher Collaboration Session Evaluation Form

Appendix E

Peer Coaching Experience Evaluation Form

Peer Coaching Experience Evaluation Form

Teacher: _____

Date: _____

1. Describe the main focus of the peer coaching session.

2. List any personal and/or professional benefits derived from this session.

3. Did you observe any new, interesting, or unique teaching techniques? If so, please explain.

4. What similarities, if any, did you observe in this lesson which reflect your own teaching style?

5. What aspects of this lesson did you discuss with the teacher? Why?

Appendix F
Staff Development Program Evaluation Form

Staff Development Program Evaluation Form

Teacher: _____

Date: _____

1. What topics were helpful to you in terms of improving instruction?
2. What new teaching technique or strategy will you use in future lessons?
3. What do you perceive to be the benefits for your students as a result of your participation in this staff development program?
4. Please list additional topic areas you would like to be presented in future staff development programs.
5. Please list any suggestions for improvement of this training program.

Appendix G
Articulation Session Evaluation Form

Articulation Session: Reading and Math Teacher Evaluation Form

Teacher: _____

Date: _____

1. Describe the main focus of this collaboration session.
2. List any personal and/or professional benefits derived from this session.
3. List any outcomes of this session which you intend to incorporate into future lessons.
4. List any topics you would like to discuss in future articulation sessions.
5. Please list any additional feedback you would like to share regarding this session.

Appendix H

Evaluation of Educational Leader as a Resource Person

Evaluation of Educational Leader as a Resource Person for Grouping
Program Improvement Plan

Teacher:(Optional)_____

Date:_____

Please describe your experience with the facilitator of the grouping program improvement plan. Identify her leadership style, strengths, weakness, communication skills, and her qualities which accurately assess her abilities as a change agent for educational improvement.

Biographical Data

Name	Diane Cioffi-Longo
High School	Glassboro High School Glassboro, New Jersey
Undergraduate	Bachelor of Arts Elementary Education Rowan University Glassboro, New Jersey
Graduate	Master of Arts School Administration Rowan University Glassboro, New Jersey
Present Occupation	Sixth Grade Teacher Thomas E. Bowe School Glassboro, New Jersey